



GOOD-ARK

1N4448

SILICON EPITAXIAL PLANAR DIODE

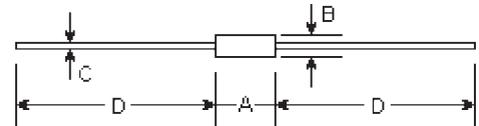
Features

Silicon Epitaxial Planar Diode

fast switching diode.

DO-35

This diode is also available in MiniMELF case with the type designation LL4448.



DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	-	0.154	-	3.9	
B	-	0.075	-	1.9	ϕ
C	-	0.020	-	0.52	ϕ
D	1.083	-	27.50	-	

Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

	Symbols	Values	Units
Reverse Voltage	V_R	75	Volts
Peak reverse voltage	V_{RM}	100	Volts
Rectified current (Average) Half wave rectification with Resist. Load at $T_{amb}=25^\circ\text{C}$ and $f \geq 50\text{Hz}$	I_o	150 ⁽¹⁾	mA
Surge forward current at $t < 1\text{s}$ and $T_j = 25^\circ\text{C}$	I_{FSM}	500	mA
Power dissipation at $T_{amb} = 25^\circ\text{C}$	P_{tot}	500 ⁽¹⁾	mW
Junction Temperature	T_j	200	$^\circ\text{C}$
Storage temperature range	T_s	-65 to +200	$^\circ\text{C}$

Note:

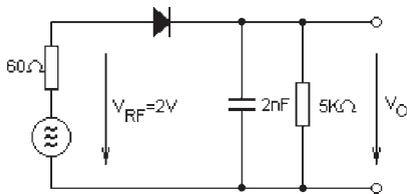
(1) Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature

Characteristics at $T_j=25^\circ\text{C}$

	Symbols	Min.	Typ.	Max.	Units
Forward voltage at $I_F=5\text{mA}$ at $I_F=100\text{mA}$	V_F V_F	0.62 -	- -	0.72 1	Volt
Leakage current at $V_R=20\text{V}$ at $V_R=75\text{V}$ at $V_R=20\text{V}$, $T_j=150^\circ\text{C}$	I_R I_R I_R	- - -	- - -	25 5 50	nA uA uA
Reverse breakdown voltage tested with 100uA pulses	$V_{(BR)R}$	100	-	-	Volts
Capacitance at $V_F=V_R=0$	C_{tot}	-	-	4	pF
Reverse recovery time from $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $V_R=6\text{V}$, $R_L=100\ \Omega$	t_{rr}	-	-	4	nS
Thermal resistance junction to ambient Air	R_{thA}	-	-	0.35 ⁽¹⁾	K/mW
Rectification efficiency at $f=100\text{MHz}$, $V_{RF}=2\text{V}$	η_V	0.45	-	-	-

Note:

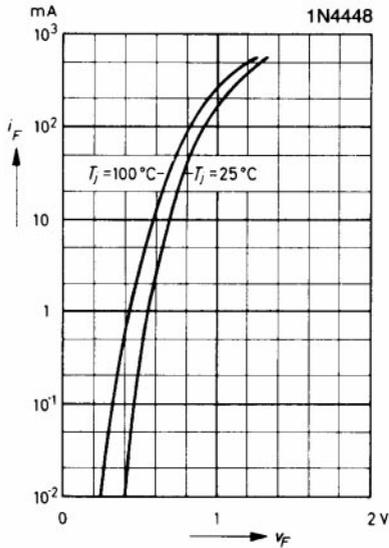
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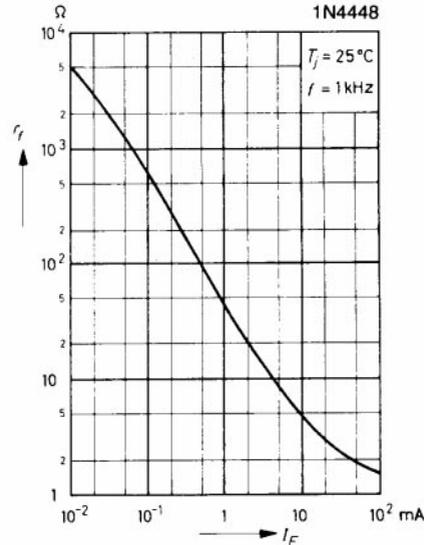
Rectification efficiency measurement circuit

RATINGS AND CHARACTERISTIC CURVES

Forward characteristics

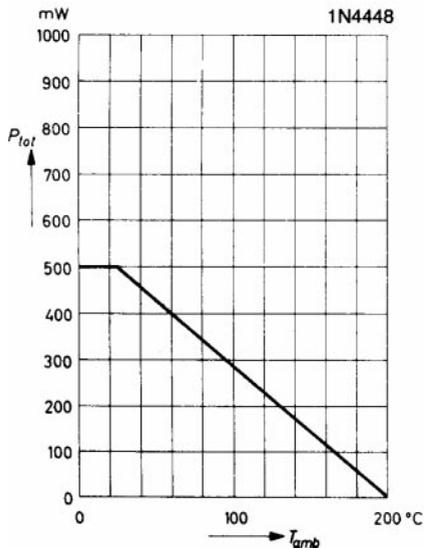


Dynamic forward resistance versus forward current

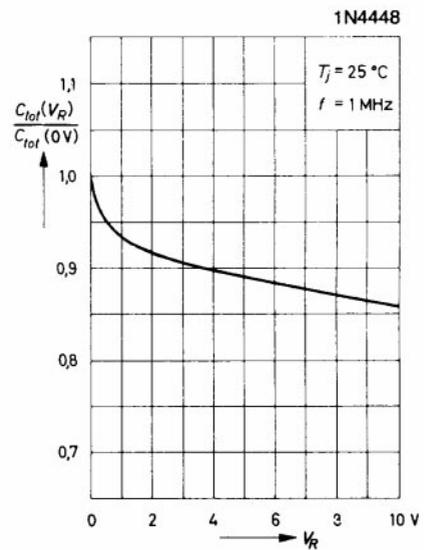


Admissible power dissipation versus ambient temperature

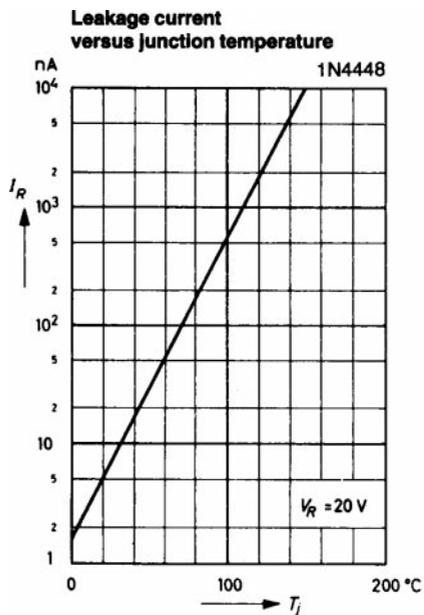
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Relative capacitance versus reverse voltage



RATINGS AND CHARACTERISTIC CURVES



Admissible repetitive peak forward current versus pulse duration

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